

CLAIMS

1. A liquid crystal display device comprising: a pair of substrates bonded to each other by a sealing material in the form of a frame provided therebetween; liquid crystal held between the pair of substrates; a reflective layer formed on one of the substrates at the liquid crystal side; and an alignment film formed over the reflective layer at the liquid crystal side;

wherein a surface of said one of the substrates has a roughened area which is roughened and a flat area which is flat and surrounds the roughened area,

the alignment film is formed in the roughened area, and
the sealing material is formed in the flat area.

2. The liquid crystal display device according to Claim 1, wherein a boundary of the roughened area and the flat area is located between an inside periphery of the sealing material and a periphery of the alignment film.

3. The liquid crystal display device according to Claim 1 or 2, wherein the reflective layer has a plurality of apertures therein.

4. The liquid crystal display device according to one of Claims 1 to 3, further comprising a color filter layer and a protective layer protecting the color filter, which are provided between the reflective

00336742-091301

2A57



Sub A5 layer and the alignment film and in the roughened area of said one of
comd. the substrates.

5. An electronic apparatus comprising a liquid crystal display device
5 according to one of Claims 1 to 4.

6. A method for manufacturing a liquid crystal display device
comprising a pair of substrates bonded to each other by a sealing
material provided therebetween, liquid crystal held between the pair of
substrates, a reflective layer formed on one of the substrates at the
liquid crystal side, and an alignment film formed over the reflective
layer at the liquid crystal side, the method comprising:

a step of covering an area in a vicinity of a periphery of a
surface of said one of the substrates with a mask material;

15 a step of forming a roughened area by roughening an area of the
surface except the area covered with the mask material;

a step of forming the reflective layer and the alignment film in
the roughened area;

a step of forming the sealing material in a flat area which is
20 previously covered with the mask material; and

a step of bonding said one of the substrates to the other substrate
by the sealing material provided therebetween.

7. The method for manufacturing a liquid crystal display device,
25 according to Claim 6,

wherein said one of the substrates comprises a first composition in a mesh shape, and a second composition present between the meshes of the first composition; and

in the step of forming the roughened area, etching is performed on
5 said one of the substrates using a treatment solution, for which a rate of dissolution of the first composition differs from a rate of dissolution of the second composition, for forming a roughened surface in conformity with the shape of the first composition in the area except the area covered with the mask material.

8. The method for manufacturing a liquid crystal display device, according to Claim 6,

wherein, in the step of forming the roughened area, the surface of said one of the substrates is bombarded with a particle member via the
15 mask material for roughening the area except the area covered with the mask material.

SUB A67 9. The method for manufacturing a liquid crystal display device, according to one of Claims 6 to 8, further comprising a step of removing
20 the mask material after the step of forming the roughened area is performed, and a step of etching the flat area and the roughened area.

ADD A7

ADD B17